The mechanism may be advanced one step manually by the teacher without touching the screen **14** by pressing a switch SW**6**. This energizes a relay RLR. In the de-energized position, contacts RLR**1** and RLR**2** keep capacitors **86** and **88** fully charged. When the relay RLR is energized, the contacts RLR**1** and RLR**2** enable positive pulse to be applied to respective trigger electrodes of the tubes **72** and **74**. This then causes relays RLD, RLE and RLG to operate without the screen being touched.

The performance level of the subject is measured by using a device for computing moving weighted averages. This is an analogue computation and its basis of operation is the controlled charge and discharge of a low leakage plastic film capacitor **90**. The capacitor **90** is charged from a constant current source **92** through relay contacts RLD**1**, RLE**2** and RLH**1**. When the contact RLE**2** is closed, a current drain circuit **94** preferably comprising a resistor is shunted across the capacitor **90**. This allows a small percentage of the charge on the capacitor **90** to leak away. A relay RLH is connected in series with a cold cathode tube **96**, whose trigger electrode is connected to each of the leads from the photo-conductive cells **56**, **57** and **58** through diodes **98**, **99** and **100**. The arrangement acts as a "NOR" circuit, and is used to inhibit the action of the performance level computer when there are less than three pictures shown. Provided all three photo-conductive cells are energized the tube **96** will strike and the relay RLH is energized so that the contact RLH**1** does not break the circuit in the computer. If one of the photo-conductive cells is blacked out, the tube **96** does not strike and the relay RLH is not energized and so inhibits the computer by opening contact RLH**1**.

The voltage stored in the capacitor is applied to a zero drain voltage sampler **102**. An electrostatic volt metre **104** gives a visual indication of the level of performance. The output from the voltage sampler **102** is applied to a circuit **106** in which a given criterion is set. When the level of performance exceeds this criterion, the circuit **106** emits a positive going pulse which is applied to the trigger electrode of a cold cathode tube **108**. This tube **108** is in series with a relay RLK across the 300 volt D.C. supply. A circuit **97** provides a 50 volt reference.

Three lamps ILP**1**, ILP**2** and ILP**3** on the teacher's panel inform him of the progress of the subject. These are fed from a 6.3 volt A.C. supply obtained from a power unit **110** from which the 300 volt D.C. supply is obtained. The lamps ILP**1** and ILP**2** are arranged in parallel although only one can be lit at any one time because only one circuit can be completed through relay contact RLP**1** according to whether or not the relay RLP has been energized. A relay contact RLQ**1** is also in this circuit so that before either lamp can be lit the contact RLQ**1** must be closed. The lamp ILP**1** when lit indicates a correct response and the lamp ILP**2** when lit indicates an incorrect response. The lamp ILP**3** is in series with the contact RLK**1** of relay RLK in the computer so that when the lamp is lit it indicates that the subject has reached the level of performance set in the circuit **106**.

At the end of each cycle the relay RLG is operated from the synchronisation pulse recorded on the tape. Contacts RLG**2** operate the slide advancing mechanism of the projector and contacts RLG**1** energize the relay RLN which then resets the electronics remaining energized for approximately half a second to allow for the slide mechanism to change. This may be done manually by means of the switch SW**4**.

All the switches, lamps, volt metre **104** and other controls are arranged on the panel of the operator's box which is remote from the subject's console.

The terms slide, slide advance, or slide changing mechanism may also be considered to be the equivalent of the terms frame, frame advance, or frame changing mechanism, respectively.

What we claim and desire to secure by Letters Patent is:

1. A touch detecting teaching machine including a display screen; a plurality of aligned transparent touch sensitive areas located on the screen; image projecting means for displaying on one part of the display screen symbolic visual information and on the other part a plurality of further items, each item substantially covering a corresponding area of the plurality of touch sensitive areas, one of which items is related to the symbolic visual information displayed on the first part of the screen; electronic registering means for determining which one of the plurality of touch sensitive areas and hence which further item is first selected by the subject touching the area on which the selected item is projected; means for giving an audible indication only if the correct related item was first touched by the subject; and means for changing the display to another display after a predetermined interval of time from the first touching response whether or not the correct related item has been touched.

2. A touch detecting teaching machine according to claim **1**, wherein the plurality of touch sensitive areas are of equal size and the electronic registering means includes a plurality of high resistance D.C. sources, each of said touch sensitive areas being connected to a high resistance D.C. source; means for detecting a slight drop in the voltage across each of said sources when the appropriate areas are touched; and means for utilizing this drop in voltage to register which of the areas has been touched.

3. A touch detecting teaching machine according to claim **2**, wherein each resistance D.C. source includes a pair of high value resistors connected across a D.C. supply, the junction between the resistors being connected to the respective touch sensitive areas and wherein there is provided in association with each D.C. source, an A.C. coupled amplifier whose input is connected to the junction between the resistors, the A.C. coupled amplifier emitting a voltage pulse each time the associated touch sensitive area is touched.

4. A touch detecting teaching machine according to claim **1**, wherein the electronic registering means includes a plurality of pairs of high value resistors connected across a high tension D.C. voltage supply, the junctions between the pairs of resistors being connected to the respective touch sensitive areas; a plurality of amplifiers, the input to each amplifier being connected to a respective junction between the resistors; a plurality of cold cathode tubes, the trigger electrodes of which are connected to the outputs of respective amplifiers; a plurality of relays, the energizing coils of which are connected in the anode circuits of respective cold cathode tubes, the arrangement being such that when an area is touched the appropriate relay is energized by the firing of its associated cold cathode tube; and means for inhibiting the firing of the other tubes once one tube had fired.

5. A touch detecting teaching machine according to claim **1**, wherein the means for displaying the information in pictorial form is a projector having an automatic continuous slide changing mechanism housed within a cabinet, the screen being located on the front panel of the cabinet; and wherein each slide has two coding zones which are not projected onto the screen and each zone is divided into a plurality of sections which are either clear or blacked out, said sections being interposed between respective light sources and photo-conductive cells, the cells associated with one zone being utilized to effect the slide advance mechanism of the projector and the cells associated with the other zone being utilized to operate the means for giving an audible indication only if the related item is touched; whereby the circuit associated with the first set of photoconductive cells is in the form of an "AND" circuit giving an output whenever at